CURRICULUM VITAE

BSc, MBBS, MRCP (UK), PhD, FRCPE, FMedSci Jonathan Robert SECKL

	i, PRIZES AND FELLOWSHIPS Filliter Prize (1st in Pathology and Microbiology MB).
1978	
1980	Hons Viva (Medicine).
1980	Magrath Scholarship/Fellowes Gold Medal (Medicine MB).
1980	The Achison Exhibition (Medicine).
1984	cia Julea Thorn Trust Research Fellowship.
1989	Wellcome Trust/Royal Society of Edinburgh Senior Clinical Research Fellowship.
1993	Wellcome Trust Senior Research Clinical Fellowship Renewal
1993	FRCP Edin
1994	Norage Pharmacia Prize (best paper on brain aging)
1998	Society for Endocrinology Medal
1999	Mortyn Jones Memorial Lecturer
1999	Fellowship, Academy of Medical Sciences

PRESENT APPOINTMENTS

PKESEMI W	Profits in the series of Edinburgh
1997	Moncrieff-Arnott Professor of Molecular Medicine, University of Edinburgh.
1007	Chairman, Molecular Medicine Centre, University of Edinburgh.
1995	Honorary Consultant Physician (Endocrinology), Western General Hospital.
1989	Honorary Consultant Physician (Endocrinology), Western Sons and Physician (Endocrinology),

PREVIOUS APPOINTMENTS

LICENIO	7074
1996-97	Professor of Endocrinology, University of Edinburgh.
1993-96	Senior Lecturer in Medicine, University of Edinburgh.
	Wellcome Trust/Royal Society of Edinburgh Senior Clinical Research Fellow.
1989-97	Visiting Scientist, MRC Brain Metabolism Unit, Edinburgh.
1987-92	Visiting Scientist, MRC Brail Metabolish Office Leathers in Medicine
1987-89	University of Edinburgh, Department of Medicine, Lecturer in Medicine
1984-87	Para Madical Cabaol Research Fellow Neuroendocrinology.
1204-01	Ondring Gross and The Control of the

EDITORIAL BOARDS

Endocrinology (US); Steroids (US); Journal of Neuroendocrinology; Journal of Endocrinology

KEY RELEVANT PRIMARY PUBLICATIONS IN PEER-REVIEWED JOURNALS (OF 155)

Moisan M-P, Seckl JR and Edwards CRW (1990). 11B-hydroxysteroid dehydrogenase mRNA expression and activity in rat hypothalamus, hippocampus and cortex, Endocrinology 127: 1450-1455. Moisan M-P, Seckl JR, Brett LP, Monder C, Agarwal AK, White PC and Edwards CRW (1990). 118-hydroxysteroid dehydrogenase mRNA

expression, bioactivity and immunoreact-ivity in rat cerebellum. J Neuroendocrinol 2: 853-858. Moisan M-P, Edwards CRW and Seckl JR (1992). Ontogeny of 11B-hydroxysteroid dehydrogenase bioactivity and messenger RNA expression in rat brain and kidney. Endocrinology 130: 400-404.

Moisan M-P, Edwards CRW and Seckl JR (1992). Differential promoter usage by the rat 118-hydroxysteroid dehydrogenase gene. Molecular

Seckl JR, French KL, O'Donnell D, Meaney MJ, Yates C and Fink G (1993). Glucocorticoid receptor gene expression is unaltered in

hippocampal neurons in Alzheimer's disease. Molec Brain Res 18: 239-245. Benediktsson R, Lindsay R, Noble J, Seckl JR and Edwards CRW (1993). Glucocorticoid exposure in utero: a new model for adult Edwards CRW, Benediktsson R, Lindsay R and Seckl JR (1993). Dysfunction of the placental glucocorticoid barrier: a link between fetal

Brown RW, Chapman, KE, Edwards CRW and Seckl JR (1993). Human placental 118-hydroxysteroid dehydrogenase: partial purification of environment and adult hypertension? Lancet 341: 355-357. and evidence for a distinct NAD-dependent isoform. Endocrinology 132: 2614-2621. Low SC, Assaad SN, Rajan V, Chapman KE, Edwards CRW and Seckl JR (1993). Regulation of 118-hydroxysteroid dehydrogenase by sex steroids in vivo: further evidence for the existence of a second dehydrogenase in rat kidney. J Endocrinol 139: 27-35.

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Leckie C, Chapman KE, Edwards CRW and Seckl JR (1995). LLC-PK1 cells model 11B-hydroxysteroid dehydrogenase type 2 regulation of glucocorticoid access to renal mineralocorticoid receptors. Endocrinology 136: 5561-5569.

Rajan V, Edwards CRW, Seckl JR (1996). 11B-hydroxysteroid dehydrogenase in cultured hippocampal cells reactivates inert 11-

dehydrocorticosterone, potentiating neurotoxicity J Neuroscience 16: 65-70. Brown RW, Chapman KE, Edwards CRW and Seckl JR (1996). Purification of 11B-hydroxysteroid dehydrogenase type 2 from human placenta.

Brown RW, Kotolevtsev Y, Leckie C, Lindsay RS, Lyons V, Murad P, Mullins JJ, Chapman KE, Edwards CRW and Seckl JR (1996). Isolation

and cloning of human placental 11B-hydroxysteroid dehydrogenase-2 cDNA. Biochem J 313: 1007-1017 Brown RW, Diaz R, Robson AC, Kotolevtsev Y, Mullins JJ, Kaufman MH and Seckl JR (1996). The ontogeny of 11B-hydroxysteroid dehydrogenase type 2 and mineralocorticoid receptor gene expression reveal intricate control of glucocorticoid action in development. Voice M, Seckl JR and Chapman KE (1996). The sequence of 5'-flanking DNA from mouse 118-hydroxysteroid dehydrogenase type 1 and

analysis of puative transcription factor binding sites. Gene 181: 233-235. Lindsay RS, Lindsay RM, Edwards CRW and Seckl JR (1996). Inhibition of 118-hydroxysteroid dehydrogenase in pregnant rats and the programming of blood pressure in the offspring. Hypertension 27: 1200-1204.

Voice M, Seckl JR, Edwards CRW and Chapman KE (1996). 118-hydroxysteroid dehydrogenase type 1 expression in 2S-FAZA hepatoma cells

is hormonally-regulated: a model for the study of hepatic corticosteroid metabolism. Biochem J 317: 621-625. Waddell B, Benediktsson R and Seckl JR. (1996). 118-hydroxysteroid dehydrogenase type 2 in the rat corpus luteum: induction of mRNA

expression and bioactivity coincident with luteal regression. Endocrinology 137: 5386-5391. Lindsay RS, Lindsay RM, Waddell B and Seckl JR (1996). Programming of glucose tolerance in the rat: role of placental 11B-hydroxysteroid

Rose KR, Stapleton G, Kieny M-P, Russell DW, Björkheim I, Seckl JR, Lathe R (1997). Cyp7b, a novel brain cytochrome P450, catalyses the synthesis of neurosteroids 7a-hydroxy DHEA and 7a-hydroxypregnenolone. Proc Natl Acad Sci USA 94: 4925-4930.

Kotolevisev Y, Holmes MC, Burchell A, Houston PM, Schmoll D, Jamieson PM, Best R, Brown R, Edwards CRW, Seckl JR and Mullins JJ 118-hydroxysteroid dehydrogenase type 1 knockout mice show attenuated glucocorticoid inducible responses and resist hyperglycaemia on obesity or stress. Proc Natl Acad Sci USA 94: 14924-14929. Diaz R, Brown R, Seckl JR (1998). Ontogeny of mRNAs encoding glucocorticoid and mineralocorticoid receptors and 11B-HSDs in prenatal rat

brain development reveal complex control of glucocorticoid action. J Neurosci 18: 2570-2580. Napolitano A, Voice M, Edwards CRW, Seckl JR and Chapman KE (1998). 11B-hydroxysteroid dehydrogenase type 1 in adipocytes: expression

is differentiation-dependent and hormonally-regulated. J Steroid Biochem Molec Biol 64: 251-260. Waddell B, Benediktsson R, Brown R and Seckl JR. (1998). Tissue-specific mRNA expression of 11B-hydroxysteroid dehydrogenase types 1 and 2 and the glucocorticoid receptor within rat placenta suggest exquisite local control of glucocorticoid action. Endocrinology 139: 1517-

Nyirenda M, Lindsay RS, Kenyon CJ, Burchell A and Seckl JR (1998). Glucocorticoid exposure in late gestation permanently programmes rat hepatic phosphoenolpyruvate carboxykinase and glucocorticoid receptor expression and causes glucose intolerance in adult offspring. J Clin Robson AC, Leckie C, Seckl JR and Holmes MC (1998). Expression of 11B-hydroxysteroid dehydrogenase type 2 in the postnatal and adult rat

Jamieson PM, Chapman KE, Walker BR and Seckl JR (1999). Interactions between oestradiol and glucocorticoid regulatory effects on liverspecific glucocorticoid-inducible genes: possible evidence for a role of hepatic 11 beta-hydroxysteroid dehydrogenase type 1. J Endocrinol Jamieson PM, Chapman KE and Seckl JR (1999). Tissue- and temporal-specific regulation of 11B-hydroxysteroid dehydrogenase type 1 by

glucocorticoids in vivo. J Steroid Biochem Molec Biol 68: 245-250. Kotelevtsev Y, Brown RW, Fleming S, Kenyon CJ, Edwards CRW, Seckl JR and Mullins JJ (1999). Hypertension in mice lacking 118hydroxysteroid dehydrogenase type 2. J Clin Invest 103: 683-689. Meaney MJ, Diorio J, Francis D, Weaver S, Yau JLW, Chapman KE, Seckl JR (2000). Postnatal handling increases the expression of cAMP-

inducible transcription factors in the rat hippocampus: The effects of thyroid hormones and serotonin. J. Neurosci 20: 3926-35.

Welberg LAM, Seckl JR and Holmes MC (2000). Inhibition of 11B-hydroxysteroid dehydrogenase, the feto-placental barrier to maternal glucocorticoids, permanently programs amygdala glucocorticoid receptor mRNA expression and anxiety-like behavior in the offspring. Jamieson PM, Chaman KE, Walker BR and Seckl JR (2000). 118-hydroxysteroid dehydrogenase type 1 is a predominant 118-reductase in the

Williams LJS, Lyons V, MAcLeod I, Rajan V, Darlington GJ, Poli V, Seckl JR and Chapman KE (2000). C/EBPD regulates hepatic transcription of 11B-hydroxysteroid dehydrogenase type 1; a novel mechanisms for cross-talk between the C/EBP and glucocorticoid signalling pathways. J Biol Chem 275: 30232-30239. Harris HJ, Kotelevtsev Y, Mullins JJ, Seekl JR and Holmes MC (2001). 118-hydroxysteroid dehydrogenase type 1 null mice have altered

hypothalamic-pituitary-adrenal axis activity: a novel control of glucocorticoid feedback. Endocrinology 142: 114-120.

Seckl JR (1993). 118-HSD isoforms and their implications for blood pressure regulation. Eur J Clin Invest 23: 589-601.

Seckl JR and Brown RW (1994). 118-hydroxysteroid dehydrogenase: on several roads to hypertension. J Hypertens 12: 105-112. Seckl JR and Olsson T (1995). Glucocorticoids and the age-impaired hippocampus: cause or effect? J Endocrinol 145: 201-211.

Yau JLW and Seekl JR (1995). Corticosteroids and the brain. Curr Opin Endocrinol Diabetes: 2: 239-247. Edwards CRW, Benediktsson R, Lindsay RS and Seckl JR (1996). 11beta-hydroxysteroid dehydrogenases: Key enzymes in determining tissue-

specific glucocorticoid effects. Steroids 61: 263-269.

Seckl JR (1997). 118-hydroxysteroid dehydrogenase: regulator of glucocorticoid action in the brain. Front Neuroendocrinol 18: 49-99 Chapman KE, Kotelevtsev YV, Jamieson PM, Williams LJS, Mullins JJ and Seckl JR (1997). Tissue-specific modulation of glucocorticoid action by the 11beta-hydroxysteroid dehydrogenases. Biochem Soc Trans 25: 583-587.

Secki JR and Chapman KE (1997). Medical and physiological aspects of the 118-hydroxysteroid dehydrogenase system. Eur J Biochem 249:

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Seckl JR and Nyirenda MJ (1999). Glucocorticoids, feto-placental 118-hydroxysteroid dehydrogenase and the programming of hypertension.

Handbook of Hypertension Vol. 19: Development of the Hypertensive Phenotype; McCarty R, Blizard DA, Chevalier RL (eds); Elsevier,

Amsterdam, pp103-136.

Seckl JR (2000). 118-hydroysteroid dehydrogenases. Encyclopaedia of Stress. Fink G (ed). (in press).

Seckl JR and Walker BR (2001). 118-hydroxysteroid dehydrogenase type 1: a tissue-specific amplifier of glucocorticoid action. Endocrinology

Seckl JR and Walker BR (eds) (2001). Steroid Metabolism (book). Bailliere's Clinical Endocrinology and Metabolism (in press).